

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
ANDERSON DIVISION

UNITED STATES OF AMERICA,)
THE OFFICE OF THE GOVERNOR OF THE)
STATE OF SOUTH CAROLINA, THE)
DIRECTOR OF THE SOUTH CAROLINA)
DEPARTMENT OF NATURAL RESOURCES,)
THE COMMISSIONER OF THE SOUTH)
CAROLINA DEPARTMENT OF HEALTH AND)
ENVIRONMENTAL CONTROL, and THE) Civil Action No. _____
COMMISSIONER OF THE DEPARTMENT OF)
NATURAL RESOURCES, STATE OF GEORGIA,)
)
Plaintiffs,)
)
v.)
)
SCHLUMBERGER TECHNOLOGY)
CORPORATION,)
)
Defendant.)
)

CONSENT DECREE

A. Plaintiffs, the United States of America (“United States”), on behalf of the Secretary of the Department of the Interior, acting through the United States Fish and Wildlife Service (“DOI/USFWS”) and the Department of Defense, acting through the Army Corps of Engineers (“COE”) (collectively, the “Federal Trustees”); the Office of the Governor of the State of South Carolina, the Director of the South Carolina Department of Natural Resources (“SCDNR”) and the Commissioner of the South Carolina Department of Health and Environmental Control (“SCDHEC”) (collectively,

the “South Carolina Trustees”); and the Commissioner of the Georgia Department of Natural Resources (the “Georgia Trustee”) are simultaneously filing a complaint (the “Complaint”) alleging that Defendant Schlumberger Technology Corporation is liable for civil claims for Natural Resource Damages arising from alleged releases of polychlorinated biphenyls (“PCBs”) at and from the site known as the Sangamo Weston/ Twelvemile Creek/ Lake Hartwell PCB Contamination Superfund Site (the “Site”). The Federal Trustees, the South Carolina Trustees and the Georgia Trustee are joint trustees for the Natural Resources affected by the PCB contamination. Hereinafter, the State of South Carolina and the State of Georgia will be sometimes collectively referred to as the “States”, the South Carolina Trustees and the Georgia Trustee will be sometimes collectively referred to as the “State Trustees”, and the Federal and State Trustees will be sometimes collectively referred to as the “Trustees.”

B. The Defendant and the Trustees agreed to cooperate in assessing the Natural Resource Damages arising from alleged releases of PCBs from the Site, and the Trustees have undertaken a restoration planning process to determine the restoration projects that will most effectively restore or compensate for loss of use and injury to Natural Resources.

C. The Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), 42 U.S.C. §§ 9601 *et seq.*, and its implementing regulations require that the Trustees seek input from the public before implementing a restoration plan to address injured Natural Resources. The Trustees made the February 2005 Public Release Draft of the Restoration, Compensation, and Determination Plan for the Site available for public comment.

D. The United States, the South Carolina Trustees, the Georgia Trustee and the Defendant have consented to the entry of this Consent Decree without trial of any issues. The United States, the South Carolina Trustees, the Georgia Trustee and the Defendant assert, and the Court by entering this Consent Decree finds, that the Consent Decree has been negotiated in good faith and that the Consent Decree is fair, reasonable, and in the public interest.

NOW THEREFORE, it is ORDERED AND DECREED as follows:

I. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1345, and 1367, 33 U.S.C. § 1321(n), and 42 U.S.C. § 9613(b). This Court also has personal jurisdiction over the Defendant. Solely for the purpose of this Consent Decree and the underlying complaint, Defendant waives all objections and defenses it may have to jurisdiction of the Court or to venue in this District. Defendant shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

II. PARTIES BOUND

2. This Consent Decree applies to and is binding upon the United States, the South Carolina Trustees, the Georgia Trustee, and upon Defendant and its successors and assigns. Any change in ownership or corporate status of Defendant shall in no way alter Defendant's responsibilities under this Consent Decree. Each signatory to this Consent Decree certifies that she or he is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to it the Party for which that signatory is signing.

III. DEFINITIONS

3. Unless otherwise expressly provided herein, terms used in the Consent Decree that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or such regulations. Whenever terms listed below are used in this Consent Decree, the following definitions shall apply.

“Damage Assessment Costs” shall mean all costs associated with the planning, design, implementation, and oversight of the Trustees’ damage assessment process which addresses the extent and quantification of the injury to, destruction of, or loss of Natural Resources and the services provided by these resources resulting from the alleged releases of PCBs from the Site, and with the planning of restoration or replacement of such Natural Resources and the services provided by those Natural Resources, and any other costs necessary to carry out the Trustees’ responsibilities with respect to those Natural Resources injured by the alleged releases of PCBs from the Site.

“Draft RCDP” is the February 2005 Public Release Draft of the Restoration, Compensation, and Determination Plan prepared by the Trustees pursuant to CERCLA.

“Interest” means interest at the rate specified for interest on investments of the Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded on October 1 of each year, in accordance with 42 U.S.C. § 9607(a).

“Natural Resource Damages” shall mean all past and future damages, including loss of use, restoration or rehabilitation costs, costs of resource replacement, or acquisition of equivalent resources, or any other losses of resource services or values and Damage Assessment Costs arising from or relating to injury to, destruction of, or loss of Natural Resources resulting from the release of PCBs at or from the Site.

“Natural Resources” shall have that meaning set forth in Section 101(16) of CERCLA, 42 U.S.C. § 9601(16).

“Site” shall mean the Sangamo Weston/ Twelvemile Creek/ Lake Hartwell PCB Contamination Superfund Site, and comprises Lake Hartwell, certain tributaries, and seven properties in Pickens County, South Carolina. The Site was listed on the National Priorities List by the United States Environmental Protection Agency (“EPA”). The seven properties encompassed within the Site are a manufacturing facility known as the Sangamo Plant and six disposal areas known as the Breazeale property, the Cross Roads property, the Welborn property, the Nix property, the Dodgens property, and the John Trotter property. The Sangamo Plant and satellite disposal areas constitute Operable Unit One (“OU1”) of the Site. Operable Unit Two (“OU2”) comprises the sediment, surface water, and biological migration routes downstream from the Sangamo Plant and satellite disposal areas that have site-related PCB contamination.

“Work” shall mean implementation by the Defendant of those activities that are generally described in Section VIII (Performance of the Work) of this Consent Decree and more particularly described in the Statement of Work (“SOW”), included as Exhibit 1 to this Consent Decree. Exhibit 1 is incorporated in and shall be enforceable under this Decree.

IV. PAYMENT OF NATURAL RESOURCE DAMAGES FUNDS

4. Within forty-five (45) days of entry of this Consent Decree, Defendant shall pay a total of eleven million nine hundred sixty thousand dollars (\$11,960,000) into the Lake Hartwell Restoration Account, an account to be established within the United States Department of the Interior’s (“DOI’s”) Natural Resource Damage Assessment and

Restoration Fund (the "Restoration Account"). DOI will assign these funds a special project number to allow the funds to be maintained as a segregated account within the Restoration Account. All such funds shall be used by unanimous agreement of the Trustees to conduct or finance restoration projects designed to restore, replace or protect Natural Resources at the Site, or to provide Natural Resources equivalent to the resources that have been injured at the Site; to defray administrative costs and expenses associated with the selection and performance of restoration projects; and to monitor the ecological impact of the Work set forth in Section VIII (Performance of the Work) of this Consent Decree. Any use by the Trustees of such funds for purposes not specified in this Consent Decree will not affect in any manner the rights and obligations of the Defendant under this Consent Decree.

5. The Trustees intend to use a maximum of one hundred sixty thousand dollars (\$160,000) of the funds in the Restoration Account to plan and implement a monitoring study of the ecological impacts associated with the Work set forth in Section VIII (Performance of the Work) of this Consent Decree (the "Ecological Monitoring Study"). The remaining funds in the Restoration Account will be used to: (1) create opportunities for the public generally to harvest fish that are not subject to the fish consumption advisories currently in place for Lake Hartwell and Twelvemile Creek, (2) enhance the recreational fishery of Lake Hartwell, Twelvemile Creek, and the surrounding area, and/or (3) implement projects designed to improve the habitat and natural resources within the Twelvemile Creek corridor. Among the projects that the Trustees will consider in the restoration planning process is the removal of the dam on Twelvemile Creek presently owned by the Easley-Central Water District. A minimum of three

million six hundred sixty-seven thousand dollars (\$3,667,000) will be spent for projects within the State of Georgia. The Trustees will plan and implement the necessary projects pursuant to the relevant statutory authorities and regulations.

6. Defendant shall make the payment identified in Paragraph 4 above by electronic funds transfer to the United States in accordance with current electronic funds transfer procedures and instructions for same to be provided to Defendant by the Financial Litigation Unit of the United States Attorney's Office for the District of South Carolina following entry of this Consent Decree.

7. Defendant shall provide notice of this payment, referencing the "Twelvemile Creek/Lake Hartwell Damage Assessment", DOJ Case No. 90-11-2-696/1, and this civil action case name and number to:

UNITED STATES DEPARTMENT OF JUSTICE (DOJ):

Section Chief
Environmental Enforcement Section
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611

Referencing DOJ Case No. 90-11-2-696/1

DOI/USFWS

Department of the Interior
Natural Resource Damage Assessment and Restoration Program
Attn: Restoration Fund Manager
1849 C Street, N.W.
Mailstop 4449
Washington, DC 20240

Regional Solicitor's Office
U.S. Department of the Interior
Attn: Harriet M. Deal

75 Spring Street, SW
Rm. 304
Atlanta, GA 30303

COE

Bill D. Woodard
District Counsel
U.S. Army Corps of Engineers, Savannah District
P.O. Box 889
Savannah, GA 31401

SOUTH CAROLINA TRUSTEES

SCDNR

Paul League
South Carolina Department of Natural Resources
Office of Chief Counsel
P.O. Box 167
Columbia, SC 29202

SCDHEC

Rebecca Dotterer
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, SC 29201

GEORGIA TRUSTEE

Commissioner,
Department of Natural Resources
Floyd Towers East, Suite 1252
2 Martin Luther King Street, S.E.
Atlanta, GA 30334

Office of the Attorney General
Timothy J. Ritzka
Assistant Attorney General
40 Capitol Square S.W.
Atlanta, GA 30334-1300.

V. PAYMENT OF ASSESSMENT COSTS

8. Within forty-five (45) days of the entry of this Consent Decree, Defendant shall make the following payments to the agencies identified below to reimburse each agency for the costs it incurred in the Natural Resource Damage assessment undertaken in connection with the Site:

(a) DOI Assessment Costs: Defendant shall pay the United States two hundred twenty-one thousand thirty dollars (\$221,030) to reimburse Damage Assessment Costs incurred by DOI/USFWS through October 31, 2004. Payment shall be made by electronic funds transfer to the United States in accordance with current electronic funds transfer procedures and instructions for same to be provided to Defendant by the Financial Litigation Unit of the United States Attorney's Office for the District of South Carolina following entry of this Consent Decree. Defendant shall provide notice of payment, referencing the "Twelvemile Creek/Lake Hartwell Damage Assessment", DOJ Case No. 90-11-2-696/1, and this civil action case name and number to DOJ and DOI/USFWS at the addresses set forth in Section XII (Form of Notice).

(b) COE Assessment Costs: Defendant shall pay the United States eighty-four thousand, three hundred nineteen dollars (\$84,319) to reimburse Damage Assessment Costs incurred by COE through January 31, 2005. Payment shall be made by electronic funds transfer to the United States in accordance with current electronic funds transfer procedures and

instructions for same to be provided to Defendant by the Financial Litigation Unit of the United States Attorney's Office for the District of South Carolina following entry of this Consent Decree. Defendant shall provide notice of payment, referencing the "Twelvemile Creek/Lake Hartwell Damage Assessment", DOJ Case No. 90-11-2-696/1, and this civil action case name and number to DOJ and COE at the addresses set forth in Section XII (Form of Notice).

- (c) SCDNR Assessment Costs: Defendant shall pay SCDNR forty-nine thousand, nine hundred fifty-nine dollars (\$49,959) to reimburse Damage Assessment Costs incurred by SCDNR through January 31, 2005. Payment shall be rendered to SCDNR by cashier's or certified check, made payable to the South Carolina Department of Natural Resources. Defendant shall send check and notice of payment, referencing "Sangamo/Lake Hartwell" and this civil action case name and number to Paul League, Deputy Chief Counsel, South Carolina Department of Natural Resources, P.O. Box 167, Columbia, Sc 29202.
- (d) SCDHEC Assessment Costs: Defendant shall pay SCDHEC twenty-two thousand, nine hundred dollars (\$22,900) to reimburse Damage Assessment Costs incurred by SCDHEC through January 31, 2005. Payment shall be rendered to SCDHEC by cashier's or certified check, made payable to the South Carolina Department of Health and Environmental Control. Defendant shall send check and notice of payment, referencing "Sangamo/Lake Hartwell" and this civil action case

name and number to Rebecca Dotterer, South Carolina Department of Health and Environmental Control, 2600 Bull Street, Columbia, SC 29201.

- (e) Georgia Assessment Costs: Defendant shall pay Georgia one hundred fifty-nine thousand, two hundred ninety-three dollars (\$159,293) to reimburse Damage Assessment Costs incurred by the State of Georgia through January 31, 2005. Payment shall be rendered to the State by cashier's or certified check, made payable to the Georgia Department of Natural Resources. Defendant shall send check and notice of payment, referencing the "Twelvemile Creek/Lake Hartwell Damage Assessment" and this civil action case name and number, to Timothy J. Ritzka, Assistant Attorney General, 40 Capitol Square SW, Atlanta, GA 30334-1300.

VI. LATE PAYMENTS

9. Interest. In the event that any payment by the Defendant under Sections IV (Payment of Natural Resource Damages Funds) or V (Payment of Assessment Costs) is not received when due, Interest shall accrue on the unpaid balance through the date of payment.

10. Stipulated Penalties. In addition to the Interest required to be paid under the preceding Subparagraph, if any amounts to be paid under Sections IV (Payment of Natural Resource Damages Funds) or V (Payment of Assessment Costs) are not paid by the required date, the Defendant shall pay a stipulated penalty of \$500 per violation per day that such payment is late. Stipulated penalties for a violation of Section IV shall be

paid one-third to the United States, one-third to the State of South Carolina, and one-third to the State of Georgia. Stipulated penalties for a violation of Subparagraphs 8(a), (b) and (c) are payable to the United States. Stipulated penalties for a violation of Subparagraphs 8(d) and (e) are payable to the agencies specified in those subparagraphs. Stipulated penalties shall be paid in accordance with payment instructions to be provided by the United States or the State Trustees.

VII. PAYMENT OF FUTURE COSTS

11. Defendant shall pay the costs incurred by DOI/USFWS after October 31, 2004, and by COE, the South Carolina Trustees and the Georgia Trustee after January 31, 2005, for reviewing and responding to comments on this Consent Decree and the Draft RCDP (including the analyses required by the National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.*, contained in Appendix C to the Draft RCDP), for overseeing the Work set forth in Section VIII (Performance of the Work) until the Trustees determine that the Work has been completed in accordance with the SOW pursuant to Paragraph 19 below, and for overseeing the monitoring required by the SOW ("Future Costs"). The Trustees may submit to Defendant, on a periodic basis, an accounting of all Future Costs. Those accountings shall be sufficient to show that those Future Costs are reasonable. Future Costs shall include all direct and indirect costs, including, but not limited to, time and travel costs of Trustee personnel and associated indirect costs, contractor costs, inspection of Work activities, visits to observe the Work, discussions regarding disputes that may arise during the conduct of the Work, and review and approval or disapproval of reports. Such Trustee accounting shall specify the amount and method of payment.

12. Within forty-five (45) days of receipt of each Trustee accounting, Defendant shall pay such costs in a manner to be specified by the Trustees. In the event that any payment by the Defendant under this Section is not received when due, Interest shall accrue on the unpaid balance through the date of payment. In addition, the Defendant shall pay a stipulated penalty of \$500 per day that such payment is late. Stipulated penalties shall be paid in accordance with payment instructions to be provided by the Trustees.

VIII. PERFORMANCE OF THE WORK

13. The Trustees have determined that recovery of the habitat in Lake Hartwell and Twelvemile Creek will be enhanced by the removal of two hydroelectric dams (“Woodside I” and “Woodside II”) from Twelvemile Creek. The removal of the dams and the accompanying stream restoration activities are expected to provide significant ecological benefits for the lower portion of the Twelvemile Creek gorge. In addition, the removal of these two dams is expected to complement the remedial action that the United States Environmental Protection Agency (“EPA”) has selected for the Site because removal of the dams will allow the unimpeded flow of sediments from the Easley-Central water supply reservoir dam to Lake Hartwell, thus facilitating the natural capping of the contaminated sediments. The remedial action is set forth in the Record of Decision for Operable Unit Two (OU2) of the Site issued in June 1994. The remedial action for OU2 is being conducted pursuant to a Unilateral Administrative Order for Remedial Design and Remedial Action issued to Schlumberger Resource Management Services, Inc. (U.S. EPA Docket No. 98-25-C).

14. The Defendant shall finance and, as specified in more detail below, commence and complete performance of the Work in accordance with the SOW, included as Exhibit

1 to this Consent Decree, which is incorporated in and shall be enforceable under this Decree.

15. All Work undertaken by the Defendant pursuant to this Decree shall be performed in accordance with the requirements of all applicable federal, state and local laws and regulations. Where any portion of the Work requires a federal, state, or local permit, certification, or approval, the Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits, certifications, or approvals. This Decree is not, and shall not be construed to be, a permit issued pursuant to any federal, state or local law or regulation, nor shall it be construed in any way to affect any past, current, or future obligation of the Defendant or any other person or entity to comply with any federal, state or local law. Defendant will use best efforts to obtain property access agreements from landowners adjacent to and along the project reach. Defendant will also use best efforts to enter into a purchase/sale agreement with the present owners of the Woodside I and Woodside II dams for acquisition of the two dams and the surrounding property owned by Aquenergy Systems, Inc. prior to removal of the two dams.

16. All aspects of the Work shall be under the direction and supervision of a qualified contractor ("Supervising Contractor"), the selection of which shall be subject to disapproval by the Trustees. The Supervising Contractor selected by the Defendant and approved by the Trustees is Restoration Systems LLC. If at any time hereafter Defendant proposes to use a different Supervising Contractor for the Work, Defendant shall notify the Trustees and shall obtain from the Trustees an authorization to proceed before a new Supervising Contractor performs any Work. The Trustees' authorization shall not be

unreasonably withheld. Any change in the Supervising Contractor made pursuant to this Paragraph shall not excuse any Work, deadlines, or schedules required under this Consent Decree.

17. Defendant shall submit written Quarterly Progress Reports to the Trustees with respect to actions and activities taken pursuant to this Section. The quarterly progress reports shall be submitted on October 15, January 15, April 15 and July 15 following the entry of this Consent Decree. Defendant's obligation to submit Quarterly Progress Reports continues until this Consent Decree is terminated pursuant to Section XX (Termination). In addition, the Trustees may request periodic briefings by Defendant to discuss the progress of the Work.

18. At a minimum, the Quarterly Progress Reports shall: (1) describe the actions which have been taken to comply with this Consent Decree during the prior quarter; (2) include all results of sampling and tests and all other data received by Defendant and not previously submitted to the Trustees; (3) include all plans, reports, deliverables, and procedures completed under the SOW during the previous quarter; (4) describe the work planned for the next quarterly period; and (5) describe all significant problems encountered and any anticipated significant problems, any actual or anticipated significant delays, and solutions developed and implemented to mitigate or address any actual or anticipated significant problems or delays.

19. Within sixty (60) days after Defendant concludes that the Work required pursuant to this Consent Decree has been fully performed, it will submit a Final Report to the Trustees. At a minimum, this Final Report shall include: (1) construction design drawings; (2) a detailed description of all work completed; and (3) the results of the

monitoring required by the SOW. If, after the Trustees' receipt and review of the Final Report, the Trustees determine that the Work or any portion thereof has not been completed in accordance with the SOW included as Exhibit 1, the Trustees shall notify Defendant in writing of the activities that must be undertaken to complete the Work in accordance with the SOW and shall set forth in the notice a schedule for performance of such activities. The Trustees shall not unreasonably delay or withhold that notice.

Defendant shall perform all activities described in the notice in accordance with the specifications and schedules established therein; provided, however, that the Trustees may only require the Defendant to perform Work in accordance with the SOW.

Defendant shall submit for approval a new Final Report once the Work has been completed. If, upon review of the Final Report, the Trustees determine that the Work has been completed in accordance with the SOW, they shall notify Defendant in writing that the Work has been completed in accordance with the SOW. The Trustees shall not unreasonably delay or withhold that notice.

20. Certification of Quarterly Progress Reports and Final Report. The Quarterly Progress Reports and the Final Report submitted by Defendant pursuant to this Section of the Consent Decree shall be certified by a responsible corporate official of the Defendant and accompanied by the following certification:

I certify that the information contained in or accompanying this submission is true, accurate and complete. This certification is based on my personal preparation, review, or analysis of the submission, and/or supervision of persons who, acting on my instructions, made the verification that the submitted information is true, accurate and complete.

21. Stipulated Penalties. The Defendant shall be liable for a stipulated penalty of \$500 per violation per day for any delayed compliance or noncompliance with a

requirement to submit a Quarterly Progress Report or a Final Report required under this Section. Any stipulated penalty shall be paid one-third to the United States, one-third to the State of South Carolina, and one-third to the State of Georgia. Stipulated penalties shall be paid in accordance with payment instructions to be provided by the United States and the State Trustees.

IX. PROJECT COORDINATORS

22. Within thirty (30) days after entry of this Consent Decree, Defendant and the Trustees as a group will notify each other, in writing, of the name, address, and telephone number of their respective designated project coordinator for the Work. If a project coordinator initially designated is changed, the identity of the successor will be provided at least five days before the change occurs, unless impracticable.

X. UNITED STATES AND THE STATES NOT LIABLE

23. The United States and the States of South Carolina and Georgia, including all of their officials, agents, employees, contractors, subcontractors, representatives, agencies and departments, assume no liability for any injuries or damages to persons or property resulting from acts or omissions by Defendant, or its officers, directors, employees, agents, representatives, successors, assigns, contractors, subcontractors, or any person acting on its behalf or under its control in carrying out any action or activity pursuant to this Consent Decree. Neither the United States, the State of South Carolina, the State of Georgia, nor any of their officials, agents, employees, contractors, subcontractors, representatives, agencies and departments may be deemed a party to any contract entered into by Defendant or its officers, directors, employees, agents, representatives,

successors, assigns, contractors, subcontractors, or any person acting on its behalf or under its control in carrying out any action or activity pursuant to this Consent Decree.

XI. INDEMNIFICATION

24. The Defendant shall indemnify, save and hold harmless the Plaintiffs and their officials, agents, employees, contractors, subcontractors, representatives, agencies and departments for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of the Defendant, or its officers, directors, employees, agents, representatives, successors, assigns, contractors, subcontractors, or any person acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree. Further, the Defendant agrees to pay the Plaintiffs all costs incurred including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the Plaintiffs based on negligent or other wrongful acts or omissions of the Defendant or its officers, directors, employees, agents, representatives, successors, assigns, contractors, subcontractors, or any person acting on its behalf or under its control in carrying out activities pursuant to this Consent Decree. Neither the Defendant nor any of its contractors shall be considered agents of the Plaintiffs. This indemnification obligation does not include any claim, cause of action, or cost arising from, or on account of, a negligent or wrongful act or omission of the Plaintiffs.

XII. FORM OF NOTICE

25. Except as specified otherwise, when written notification or reporting to, or communication with, the United States, DOJ, DOI/USFWS, COE, the South Carolina Trustees, the Georgia Trustee, or the Defendant is required by the terms of this Consent Decree, it shall be addressed as follows:

United States or DOJ:

Section Chief
Environmental Enforcement Section
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611
Re: DOJ Case No. 90-11-2-696/1

DOI/USFWS

Diane Duncan
Ecological Services Office
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407

Regional Solicitor's Office
U.S. Department of the Interior
Attn: Harriet M. Deal
75 Spring Street, SW
Rm. 304
Atlanta, Georgia 30303

COE

Jamie Sykes
Richard B. Russell Project Office
4144 Russell Dam Drive
Elberton, GA 30635

South Carolina Trustees

SCDNR

Paul League
South Carolina Department of Natural Resources
Office of Chief Counsel
P.O. Box 167
Columbia, SC 29202

SCDHEC

Richard Haynes, P.E., Section Manager
Federal and Drycleaning Remediation Section
Bureau of Land & Waste Management
South Carolina Dept. Health & Environmental Control
2600 Bull Street
Columbia, SC 29201

Georgia Trustee

Office of the Attorney General
Timothy J. Ritzka
Assistant Attorney General
40 Capitol Square SW
Atlanta, GA 30334-1300

Anthony Rabern
Georgia Department of Natural Resources
3695 Highway 197
Clarkesville, GA 30523

Defendant

Jane K. Edgar
Remediation Manager
Schlumberger Oilfield Services
225 Schlumberger Drive
Sugar Land, TX 77478

John N. Hanson
Beveridge & Diamond, P.C.
1350 I Street, N.W., Suite 700
Washington, DC 20005-3311

Any party to this Consent Decree may change the address to which notices shall be sent by notifying all Parties in writing.

XIII. COVENANTS NOT TO SUE BY PLAINTIFFS

26. In consideration of the payments that will be made by Defendant and the Work that will be performed by Defendant under the terms of this Consent Decree, and except as specifically provided in Paragraph 28 (Reservation of Rights) of this Section, the United States, the South Carolina Trustees, and the Georgia Trustee covenant not to sue or to take administrative action against Defendant pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9607(a)(4)(C) and (f), the Clean Water Act, 33 U.S.C. § 1321(f)(4), the South Carolina Pollution Control Act, S.C. Code Ann. § 48-1-10, *et seq.* (1987 & Supp. 2003); S.C. Code Ann. §§ 50-1-10 & -270 (1992 & Supp. 2003), the Georgia Hazardous Site Response Act, O.C.G.A. § 12-8-90 *et seq.* (2002), §§ 12-8-96 & 12-8-96.1 (2002), or the Georgia Water Quality Control Act, O.C.G.A. § 12-5-20 *et seq.* (2002), §§ 12-5-51(a) & (b), or commence any other judicial or administrative action to recover Natural Resource Damages arising from alleged releases of PCBs at or from the Site. These covenants not to sue shall take effect upon the date of entry of this Consent Decree. However, they are conditioned upon Defendant's satisfactory performance of its obligations under this Consent Decree.

27. The covenants not to sue in Paragraph 26 extend only to Defendant: provided, however, that these covenants not to sue (and the reservations thereto) shall also apply to: (i) the successors and assigns of Defendant, but only to the extent that the alleged liability of the successor or assign is based on the alleged liability of the Defendant; and (ii) the

officers, directors, and employees of the Defendant, but only to the extent that the alleged liability of the officer, director or employee is based on said person's status as an officer or employee of the Defendant, or as a result of conduct within the scope of such person's employment or authority.

28. Reservation of Rights.

- a. Notwithstanding any other provision of this Consent Decree, the United States, the South Carolina Trustees, and the Georgia Trustee reserve, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action for Natural Resource Damages if (i) conditions at the Site previously unknown to the United States, the South Carolina Trustees and the Georgia Trustee are discovered after lodging of this Consent Decree and such conditions have resulted in releases of hazardous substances that have caused injury to, destruction of, or loss of Natural Resources that were unknown to or unanticipated by the United States, the South Carolina Trustees, or the Georgia Trustee before the lodging of this Consent Decree ("Unknown Conditions"); or (ii) information is first received by the United States, the South Carolina Trustees and the Georgia Trustee after lodging of this Consent Decree, and the new information indicates that there is injury to Natural Resources of a type unknown to and unanticipated by the United States, the South Carolina Trustees and the Georgia Trustees as of the lodging of this Consent Decree ("New Information").

- b. For the purposes of this Paragraph 28 (Reservation of Rights), the following shall not be considered Unknown Conditions or New Information: (i) an increase solely in the Trustees' assessment of the magnitude of a known injury to, destruction of, or loss of Natural Resources at the Site; (ii) injury to, destruction of, or loss of Natural Resources at the Site arising from re-exposure, resuspension, or migration of hazardous substances known to be present at the Site resulting from the Work to be performed pursuant to this Consent Decree, as long as the Work is performed in accordance with this Consent Decree and the SOW; or (iii) data or information collected during the Ecological Monitoring Study described in Paragraph 5 of this Consent Decree. No information shall be deemed "new," and no condition shall be deemed "unknown," if the information or condition is contained or identified in, or could be reasonably determined from, documents and data in the possession or under the control of any of the Trustees as of the date of lodging of the Consent Decree or in the Administrative Record of Decision of EPA for OU2. It is the Trustees' understanding as of the lodging of this Consent Decree that the PCBs that currently are located on OU1 are being remediated pursuant to a Record of Decision for OU1 issued by EPA, and that there currently are no significant releases of PCBs from OU1 to the environment. Therefore, notwithstanding any other provision of this Consent Decree, if significant releases of PCBs occur from OU1 after the lodging of this Consent Decree, such releases shall be considered

Unknown Conditions and/or New Information for purposes of this Paragraph 28 (Reservation of Rights).

- c. The covenants not to sue set forth above do not pertain to any matters other than those expressly specified in Paragraph 26. The United States and the State Trustees reserve, and this Consent Decree is without prejudice to, all rights against Defendant with respect to all other matters, including but not limited to, the following: (1) claims based on a failure by Defendant to meet a requirement of this Consent Decree; (2) liability for response costs or the performance of response actions or other cleanup activity at the Site pursuant to CERCLA or any other applicable federal or state law; and (3) criminal liability.

XIV. COVENANT OF DEFENDANT

29. Subject to Paragraph 31, the Defendant hereby covenants not to sue or to assert any administrative claims or causes of action against the United States or against the States of South Carolina or Georgia with respect to Natural Resource Damages at the Site or this Consent Decree, including but not limited to:

- a. Any direct or indirect claim for reimbursement from the Hazardous Substance Superfund based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. Any claim against the United States or the States of South Carolina and Georgia, including any department, agency or instrumentality of the United States or the States of South Carolina and Georgia, under

CERCLA Sections 107 or 113, 42 U.S.C. §§ 9607 and 9613 relating to Natural Resource Damages at the Site;

- c. Any claims under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S. C. § 2412, or at common law relating to Natural Resource Damages at the Site.

30. Nothing in this Consent Decree shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. 300.700(d).

31. The Defendant reserves its right to contest any claim allowed by Section XIII (Covenants Not to Sue by Plaintiffs) of this Consent Decree, and the Defendant does not by consenting to this Consent Decree waive any defenses to such claims, except that the Defendant covenants not to assert, and may not maintain, any defense based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defense based upon the contention that the claims that are allowed by Section XIII of this Consent Decree were or should have been brought in the instant case.

XV. FORCE MAJEURE

32. “Force Majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Defendant, its contractors, or any entity controlled by the Defendant that delays the performance of any Work obligation under this Consent Decree despite the Defendant’s best efforts to fulfill the obligation. “Best efforts” shall include using best efforts to anticipate any potential force majeure event and to address the effects of any such event (i) as soon as it is occurring and (ii) after it has occurred, such that the delay is minimized to the extent reasonably possible. “Force

Majeure” does not include Defendant’s financial inability to perform any obligation under this Consent Decree.

33. If any event occurs or has occurred that may delay the performance of any Work obligation under this Decree, as to which the Defendant intends to assert a claim of Force Majeure, the Defendant shall provide notice in writing, as provided in Section XII (Form of Notice) of this Decree within ten (10) days from the time a representative of the Defendant first knew of, or by the exercise of due diligence should have known of, the delay or anticipated delay resulting from the event. Such notification shall include an explanation and description of the reasons for the delay; the anticipated duration of the delay; a description of all actions taken or to be taken to prevent or minimize the delay; and a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay. Unless otherwise agreed to by the Plaintiffs, failure to comply with the above requirements shall preclude the Defendant from asserting any claim of Force Majeure for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

34. The Defendant shall have the burden of proving, by a preponderance of the evidence, that the Defendant gave timely notice as required by the preceding Paragraph, that the Defendant used best efforts to prevent or minimize any delay attributable to the event, and that any period of delay was attributable to a Force Majeure event.

35. If the Trustees agree that any delay or anticipated delay has been justified under the provisions of this Section, the Trustees shall stipulate in writing to an extension of time for the Defendant’s performance of the affected requirement. In such circumstances, the appropriate modification shall be deemed to have been made pursuant

to Section XIX (Modification) of this Consent Decree. In the event the Parties cannot agree, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree. An extension of time for performance of the obligations affected by a Force Majeure event shall not, of itself, extend the time for performance of any other obligation.

XVI. DISPUTE RESOLUTION

36. This Section provides the exclusive mechanism for resolution of disputes arising under this Consent Decree. However, except as otherwise provided in Section XV (Force Majeure), such procedures shall not apply to actions by the Plaintiffs to enforce obligations of the Defendant under this Consent Decree that have not been disputed in accordance with this Section.

37. Any dispute shall be, in the first instance, the subject of informal negotiations between the Plaintiffs and the Defendant. Such period of informal negotiations shall not extend beyond twenty (20) days after the date that written notice of a dispute is given by either party, unless otherwise agreed to in writing by the Parties.

38. If informal negotiations do not result in resolution of the dispute, then the Plaintiffs' position will prevail, unless the Defendant exercises its right to petition the Court in accordance with this Section. The Defendant may petition the Court within thirty (30) days of the end of the informal negotiations period for resolution of the dispute. The petition shall set forth the nature of the dispute and a proposal for its resolution. Further briefing and argument on the petition will comply with the requirements of the Court.

39. In all disputes under this Section, the Defendant shall bear the burden of proof/persuasion. If the Defendant substantially prevails in any dispute hereunder it shall not be liable for any penalty associated with the disputed matter.

40. Except as otherwise provided in Section XV (Force Majeure), the invocation of dispute resolution under this Section shall not extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree not directly in dispute, unless the Plaintiffs or the Court agree otherwise.

XVII. EFFECT OF SETTLEMENT/CONTRIBUTION PROTECTION

41. The Defendant does not admit any of Plaintiffs' allegations or claims set forth herein and denies any liability for Plaintiffs' claims against the Defendant set forth in the Complaint.

42. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a party to this Consent Decree.

43. The Parties agree, and the Court hereby finds, orders, adjudges and decrees, that this Consent Decree represents a fair and reasonable settlement that is in the public interest, and that therefore the Defendant is entitled to contribution protection as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), or as otherwise provided by State or common law, for matters addressed by this Consent Decree. "Matters addressed" in this Consent Decree include all Natural Resource Damages with respect to releases of PCBs from the Site. The "matters addressed" in this Consent Decree do not include those claims as to which any Party has reserved its rights under this Consent Decree.

44. The Defendant agrees that, with respect to any suit or claim for contribution brought by it for matters related to this Consent Decree, it will notify the United States

and the State Trustees in writing no later than sixty (60) days prior to the initiation of such suit or claim, unless the giving of such advance notice would subject such suit or claim to a defense that it is barred by the statute of limitations or other time-related defense.

45. The Defendant also agrees that, with respect to any suit or claim for contribution brought against it for matters related to this Consent Decree, it will notify in writing the United States and the State Trustees within ten (10) days of the date it receives service of the complaint. In addition, Defendant shall notify the United States and the State Trustees within ten (10) days of service or receipt of any motion for summary judgment with respect to such a claim, and within ten (10) days of receipt of any order from a court setting such a case for trial.

XVIII. RETENTION OF RECORDS

46. Until three (3) years after termination of this Consent Decree pursuant to Section XX (Termination), the Defendant shall preserve and retain all records and documents now in its possession or control or that come into its possession or control, that relate to the identification, nature, and quantity of PCBs in Lake Hartwell or the surrounding watershed, the nature and extent of alleged releases of PCBs from the Site, the pathway of any alleged release of PCBs to or from the Site or Natural Resource Damages. Within ninety (90) days of the conclusion of the document-retention period set forth in this Consent Decree, upon request by any of the Plaintiffs, the Defendant shall produce or make available for inspection any non-privileged records or documents at a mutually convenient time and place, before destroying such records or documents.

47. In addition to the opportunity to obtain documents at the conclusion of the document-retention period set forth in the preceding Paragraph, any Plaintiff may request, at any time during the document-retention period, that the Defendant make available for inspection at a mutually convenient time and place any non-privileged documents retained pursuant to the preceding Paragraph. Defendant may, at its option, provide copies of such documents to Plaintiffs rather than making them available for inspection.

48. With respect to the obligation to retain, produce, or make available records set forth in this Section, the Defendant may assert that certain documents or records are privileged under the attorney/client privilege or any other privilege recognized under applicable law. If Defendant asserts any such privilege, it shall provide Plaintiffs with a privilege log relating to the subject documents. Defendant shall retain the documents that are withheld as privileged, until any privilege disputes relating to those documents are resolved.

49. This Section in no way affects or limits any obligation of the Defendant to retain records under any other administrative or judicial order or agreement, whether such order or agreement is currently extant or created in the future. Further, this Section in no way affects or limits any obligations of the Defendant to retain records under any other judicial, statutory, or common law doctrine that would otherwise require retention of records, nor does this Section limit the information-gathering authorities of the Plaintiffs under any applicable federal or state laws or regulations.

XIX. MODIFICATION

50. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by all the Parties or as ordered by the Court upon the noticed motion of any Party. Where any modification constitutes a material change to any terms of this Decree, it shall be effective only upon approval by the Court.

XX. TERMINATION

51. This Consent Decree shall terminate upon granting of a motion duly filed by the Defendant, demonstrating that the Defendant has satisfactorily completed the Work required by Section VIII (Performance of the Work) of this Decree, the payment of the amounts required by Sections IV (Payment of Natural Resource Damages Funds) and V (Payment of Assessment Costs) of this Decree, and payment of any outstanding stipulated penalties or interest under Sections VI (Late Payments) or VII (Payment of Future Costs) of this Decree. The provisions and effect of Sections XI (Indemnification), XIII (Covenants Not to Sue by Plaintiffs), XIV (Covenant of Defendant), XVII (Effect of Settlement/Contribution Protection) and XVIII (Retention of Records) shall survive termination of the Decree.

XXI. PUBLIC NOTICE

52. The Trustees have preliminarily determined that the Work to be performed and the payments to be made pursuant to this Decree constitute appropriate action to protect and restore the Natural Resources damaged as alleged in the Complaint.

53. The Parties acknowledge that this Consent Decree will be subject to a public comment period of not less than thirty (30) days. Consequently, entry of the Decree after

lodging shall be deferred to allow the time necessary for the United States and the State Trustees to obtain and evaluate public comment on this Decree. The United States and the State Trustees reserve the right to withdraw their consent to this Decree if comments received disclose facts or considerations that show that this Decree is inappropriate, improper, or inadequate.

54. The Defendant agrees to entry of this Consent Decree without further notice and shall not challenge entry. If, for any reason, the Court should decline to approve this Consent Decree in the form presented, this Consent Decree is voidable at the sole discretion of any Party and the terms may not be used for any purpose, including as evidence in any litigation.

XXII. COSTS OF SUIT

55. Each party shall bear its own costs and attorneys' fees incurred in this action through the date upon which the Consent Decree is entered.

XXIII. SERVICE

56. With regard to matters relating to this Consent Decree and its enforcement and the filing of the Complaint, the Defendant shall identify on the attached signature page the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of that entity with respect to all matters arising under or relating to this Consent Decree and the filing of the Complaint. Defendant hereby agrees to accept service of process by mail and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and in any applicable local rules of this court, including, but not limited to, service of a summons.

XXIV. RETENTION OF JURISDICTION

57. The Court shall retain jurisdiction to modify and enforce the terms and conditions of this Consent Decree and to resolve disputes arising hereunder as may be necessary or appropriate for the construction or execution of this Consent Decree.

XXV. FINAL JUDGMENT

58. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the Plaintiffs and the Defendant. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

ORDERED, Dated and ENTERED this _____ day of _____, 200__.

UNITED STATES DISTRICT JUDGE

FOR PLAINTIFF UNITED STATES OF AMERICA:

Dated: 1-9-06

~~SUE ELLEN WOOLDRIDGE~~
Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

ANN C. HURLEY
Trial Attorney
Environmental Enforcement Section
United States Department of Justice
301 Howard Street, Suite 1050
San Francisco, CA 94105

Phone: (415) 744-6480
Fax: (415) 744-6476
Email: ann.hurley@usdoj.gov

JONATHAN S. GASSER
United States Attorney

Dated: _____

By: _____
R. EMERY CLARK (Fed. ID #1183)
Assistant United States Attorney
1441 Main Street, Suite 500
Columbia, SC 29201
(803) 929-3000

FOR PLAINTIFFS THE OFFICE OF THE GOVERNOR OF THE STATE OF SOUTH CAROLINA, THE DIRECTOR OF THE SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES, AND THE COMMISSIONER OF THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL:

Dated: _____

HENRY J. WHITE
Chief Legal Counsel
Office of the Governor
Columbia, SC 29211

Dated: _____

JOHN E. FRAMPTON
Director
South Carolina Department of Natural Resources
Columbia, SC 29201

Dated: _____

C. EARL HUNTER
Commissioner
South Carolina Department of Health and
Environmental Control
Columbia, SC 29201

FOR PLAINTIFF THE COMMISSIONER OF THE DEPARTMENT OF NATURAL
RESOURCES, STATE OF GEORGIA:

Dated: _____

NOEL HOLCOMB
Commissioner
Department of Natural Resources
State of Georgia

FOR DEFENDANT SCHLUMBERGER TECHNOLOGY CORPORATION:

Dated: _____

Name:

Title:

Agent for Service of Process:

John N. Hanson, Esq.
Beveridge & Diamond, P.C.
1350 I Street, N.W.
Suite 700
Washington, DC 20005-3311

EXHIBIT 1

Statement of Work

I. Introduction

The following Statement of Work (“SOW”) outlines the work to be performed by Schlumberger Technology Corporation (“STC”) as restoration of natural resources at Twelvemile Creek/Lake Hartwell. This SOW includes a combination of dam removal (Woodside I and Woodside II dams) and stream corridor restoration within the Twelvemile Creek watershed in Pickens County, South Carolina.¹ The Woodside I dam has a maximum height of 31 feet. The dam is constructed primarily of cyclopean concrete and un-reinforced “cast in place” concrete with river stone aggregate. The Woodside II dam has a maximum height of 43 feet and is constructed mainly of stone masonry. The project reach is considered to be approximately 7,600 linear feet of Twelvemile Creek beginning approximately 700 feet downstream of Woodside II and extending approximately 1500 feet upstream of Woodside I. The creek channel has been significantly affected by the two dams, as have the eight unnamed tributaries that drain into Twelvemile Creek within the impoundments of the two dams.

In addition to fish passage problems created by the dams, high velocities below the spillways of the dams have scoured substrate materials to expose bedrock. Within the impoundments, low velocities and sediment deposition have combined to smother the riffles and pools that may have existed before the dams were built.

II. Design Goals

The proposed channel stabilization¹ design involves removing the Woodside I and Woodside II dams after removing most of the sediment behind both structures. It is estimated that approximately 325,000 cubic yards of material will be removed from behind the dams. The channel bed and banks within the project reach will then be stabilized using in-stream rock structures, plantings, and erosion control matting. The specific design goals are to:

- Dredge and remove the sediment behind the Woodside I and II dams
- Properly dispose of sediment generated during dredging operations

¹ Stream corridor restoration or stabilization includes a broad range of measures designed to enable stream corridors to recover dynamic equilibrium and function at a self-sustaining level. The measures to be implemented will be consistent with the concept of natural channel design and will be designed to enhance the stream’s natural stability and restore dynamic equilibrium of sediment transport.

- Remove Woodside I and Woodside II dams, and use natural channel design to re-establish the free flowing channel through the dam removal section
- Re-establish aquatic habitat of a free flowing stream (including re-exposure of coarse substrates)
- Provide for bank stabilization and tributary stability where landowner access has been granted
- Provide for enhanced fish passage
- Re-establish native vegetation where appropriate
- Improve recreational opportunities.

III. Deliverables

Pursuant to this SOW, STC shall submit the following deliverables to the Trustees for their review and comment: Preliminary Design, Sediment Sampling and Analysis Plan, Final Design, As-Built Report, Quarterly Progress Reports, and Final Report. The Preliminary Design and the Sediment Sampling and Analysis Plan shall be submitted within thirty (30) days following the entry of the Consent Decree. The Preliminary Design shall include a project schedule for the entire project, including submission of the remaining deliverables. The requirements and schedules for the Quarterly Reports and the Final Report are set forth in the Consent Decree (Paragraphs 17 to 20). Once the Consent Decree has been entered, each deliverable shall be submitted by STC to the Trustees' Project Coordinator, who shall be responsible for providing the Trustees' comments on that deliverable to STC. STC shall consider the Trustees' comments before proceeding with the next phase of the work.

IV. Preliminary Design

The Preliminary Design will require the collection of additional field data to supplement previous findings. The combined data will be analyzed and then integrated into the iterative process of designing a stable post-dam channel profile for the project reach. Stream corridor stabilization includes a broad range of measures designed to enable stream corridors to recover dynamic equilibrium and function at a self-sustaining level. The measures to be implemented

will be consistent with the concept of natural channel design and will be designed to enhance the stream's natural stability and restore dynamic equilibrium of sediment transport.

To design a new post-dam stable channel profile, additional cross sections and sediment profiles will be needed between the dams, as well as immediately downstream of Woodside II and several hundred feet upstream of Woodside I. This information will be correlated with and compared to the ongoing modeling of the Twelvemile Creek watershed by the U.S. Army Corps of Engineers. The synthesized data will then be used to refine the modeling parameters and finalize the stabilization design for the project reach. A base map will be created from aerial photographs, county planimetric data and USGS topographic quadrangle. The final product of the preliminary design process will be plan and profile figures with design specifications depicting the design concept and horizontal and vertical alignments for the new channel.

The following data will be collected in support of the Preliminary Design.

- Additional cross sections and a longitudinal profile of the river corridor/project reach. Longitudinal profiles will measure feature slopes, pool-to-pool spacing and feature lengths.
- Additional sediment probes to define the depth of sediments within the impoundments.
- Bankfull cross section dimensions, width/depth ratios, maximum depth and mean depth measurements, flood prone widths, and entrenchment ratios.
- Bankfull cross sectional areas and bankfull discharges, correlated with the North/South Carolina Piedmont regional curve.
- Local USGS gage station discharge and frequency information.
- Results from the preliminary HEC 6T modeling work.
- Riparian vegetation plant species identification and density counts for supplemental planting along the restored project corridor. If appropriate, such information shall be collected from a reference site rather than from the impounded reach of Twelvemile Creek.

Any of these data shall be provided to the Trustees upon their request.

V. Sediment Sampling and Analysis Plan

Prior to removal of sediment from behind Woodside I and Woodside II, the sediment will be sampled and analyzed for PCBs to determine the final disposition of the sediment. By thirty (30) days after the entry of the Consent Decree a Sediment Sampling and Analysis Plan (SAP) will be submitted to the Trustees for their review and comment. The SAP will detail the protocol for the sampling of sediment material prior to its removal.

VI. Final Design

The Final Design goal for this project will be to remove the Woodside I and Woodside II dams while simultaneously re-constructing a self-sustaining stream channel starting approximately 1500 feet upstream of Woodside I and ending approximately 700 feet downstream of Woodside II. The new channel will be designed so that the bed elevations equilibrate and do not aggrade or degrade over time. The information gathered during the Preliminary Design will be consolidated and translated to create a graphic representation of the Final Design, which will then be overlain on the base map. The Final Design will be presented in a construction package that will include:

- Demolition and construction sequence
- Plan and profile sheets showing Twelvemile Creek and its tributaries
- In-stream structure and planting details
- Typical cross sections of the stream and floodplain
- Vegetation restoration plans
- Dam demolition details
- Sediment and erosion control plans
- Construction specifications
- Locations of equipment and material staging areas
- Locations of ingress and egress rights of way
- Location(s) of dredged material disposal site(s)
- Plan for disposal and management of dredged materials

Once the Final Design has been reviewed by the Trustees and STC has obtained any required approvals and permits, it is estimated that the project will take approximately 24 months to construct, which will be dependent primarily on weather conditions and scheduling of dam removal to correlate with low flow conditions.

VII. Construction Activities

Removal of the two dams will help to accelerate natural recovery of Twelvemile Creek/Lake Hartwell by establishing a natural pattern of downstream flow of sediment into Lake Hartwell to allow for the natural attenuation and covering of PCB-bearing sediment in the lake. The following activities will be implemented as part of the deconstruction activities of the two dams and the construction activities of stream corridor restoration.

- The removal of approximately 325,000 cubic yards of sediment material from behind Woodside I and Woodside II.
- The deconstruction of Woodside I and Woodside II will be carried out in stages in order to minimize the downstream effect of these activities.
- In-stream structures will be incorporated into the stream corridor restoration activities to minimize degradation/aggradation and to enhance white water opportunities. These structures will make use of natural materials such as boulders.
- Grade control structures will be installed on tributary streams as needed to prevent channel degradation.
- Where appropriate, vegetation indigenous to the area will be utilized for streambank and floodplain stabilization formation and improvement of breeding and foraging habitat for wildlife. Species may include
 - herbaceous plants (seed mix) switchgrass, soft rush, joe pye weed, etc.
 - woody plants (bare root) tag alder, ninebark, sycamore, river birch, etc.
 - woody plants (live stakes) silky willow, silky dogwood, elderberry, etc.

VIII. As-Built Report

The As-Built Report will include survey data, graphical cross section and profile plots, construction drawings, construction notes, and photographs adequate for evaluation under the

performance standards set forth in Section X. The As-Built Report, including the as-built survey and design changes, will be submitted within sixty (60) days of completion of the dam removal and channel stabilization.

IX. Post-Construction Review and Monitoring

On a quarterly basis for one year after construction completion, STC will monitor the stream channel and include the results of this monitoring in the Quarterly Progress Reports required by Paragraphs 17-18 of the Consent Decree. The information to be provided will include the following.

- Elevations and historical comparisons of the Grade Control Points (GCPs) on Twelvemile Creek established in the Performance Standards set forth below.
- Elevations and historical comparisons of the GCPs on any structures used in the tributaries of Twelvemile Creek within the project reach.
- A longitudinal profile of the Twelvemile Creek project reach and one representative cross section upstream of Woodside I and one representative cross section upstream of Woodside II.

Any significant discrepancies will be evaluated and remedied, if appropriate.

On a semi-annual basis for one year, starting one year after construction completion, STC will monitor the planted vegetation and include the results of this monitoring in the Quarterly Progress Reports required by Paragraphs 17-18 of the Consent Decree. The information to be provided will include:

- A map depicting the location, plant species and planting densities of the supplemental plantings along Twelvemile Creek.
- A semi-annual stem count of the planted vegetation documenting plant survival rates.
- A stem count using representative plots for both planted and volunteer species.

If the planted vegetation survival rate is less than 80% one year after planting replanting will be done as soon as the plant stocks are available and the weather permits.

X. Conceptual Design and Performance Standards

The attached figures show the existing conditions and the conceptual design for the creek bed profiles in schematic format.

As shown on the conceptual design profile, short submerged sections of the dams may be left in place to form subterranean anchor points for grade control in the project reach. A small amount of sediment may be left on the upstream side of the anchors to help form a stable creek bed. The locations and types of in-stream rock structures will be selected based on the desired bed profile features as detailed in the Final Design. The intent of the design profile is to form riffles/steps and pools, and where appropriate and practicable, to provide whitewater recreational opportunities.

The conceptual design profile depicts a generalized view of riffle/step and pool locations. Because the surface features of the bedrock upstream of the dams cannot be defined during the design phase, the design will include provisions for adjusting the locations of in-stream structures based on conditions encountered in the field during construction.

Performance Standards

Achievement of the Performance Standards will be measured by comparing pre-construction and post-construction conditions. The pre-construction conditions are well documented in the RMT Report and Buck Engineering's geomorphic surveys. The Final Design will define the targeted changes in channel pattern profile and dimension. The post-construction conditions will be documented in an As-Built Survey, which will include:

- cross section surveys on the main stem of Twelvemile Creek and each affected tributary up to the limits of the pre-construction impoundment on the tributary;
- longitudinal profile surveys of Twelvemile Creek and the backwater reaches of its tributaries up to the limits of the pre-construction impoundments on the tributaries; and,
- photographs of channel form, in-stream structures and bank vegetation.

The documentation will be presented in an As-Built Report with survey data, graphical cross section and profile plots, construction drawings, construction notes, and photographs.

Six grade control points (“GCP”) will be established along the profile alignment at critical points of dynamic equilibrium.

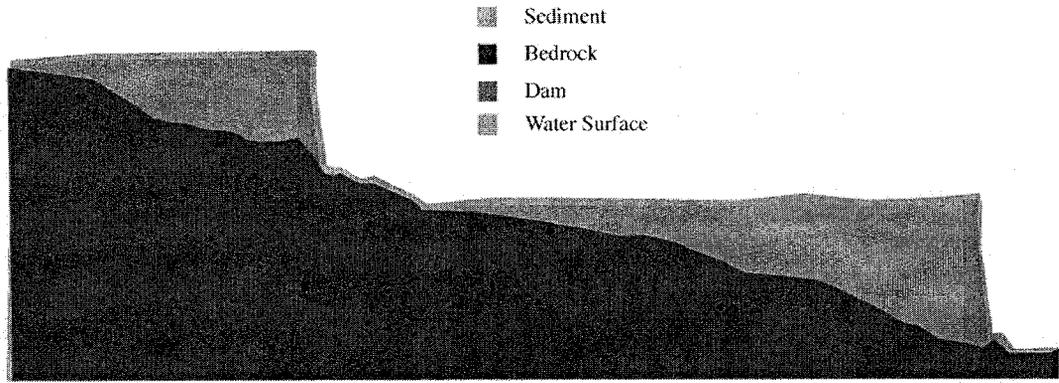
GCP1 will be at the top or beginning of the project reach and will measure the first profile adjustment from pre-construction condition to Final Design value. The post-construction condition will be within 0.3 ft. of the Final Design value.

GCP2 will be at the bottom or end of the project reach and will measure the final profile adjustment from pre-construction condition to Final Design value. The post-construction condition will be within 0.3 ft. of the Final Design value.

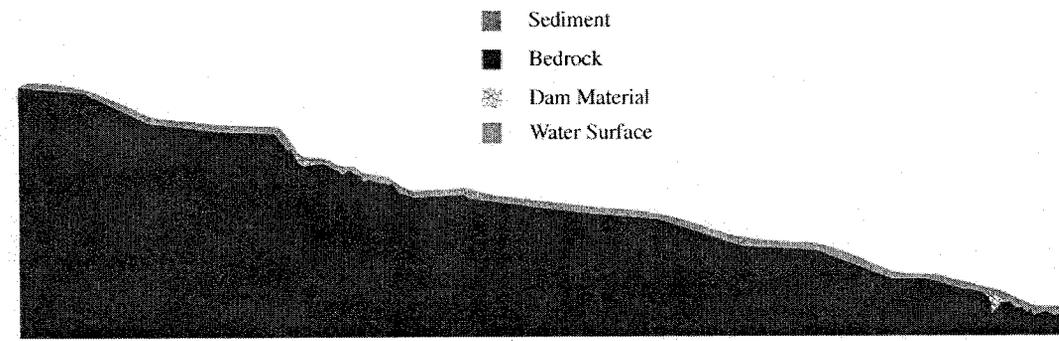
GCP3 and GCP4 will be located at the inverts of the up stream edges of the post dam removal sills as specified in the Final Design. The post-construction condition will be between the Final Design value and the existing bedrock elevation.

GCP5 and GCP6 will be located at the final step or structural invert downstream of each dam. The post-construction condition will be between the Final Design value and the existing bedrock elevation.

Existing Condition

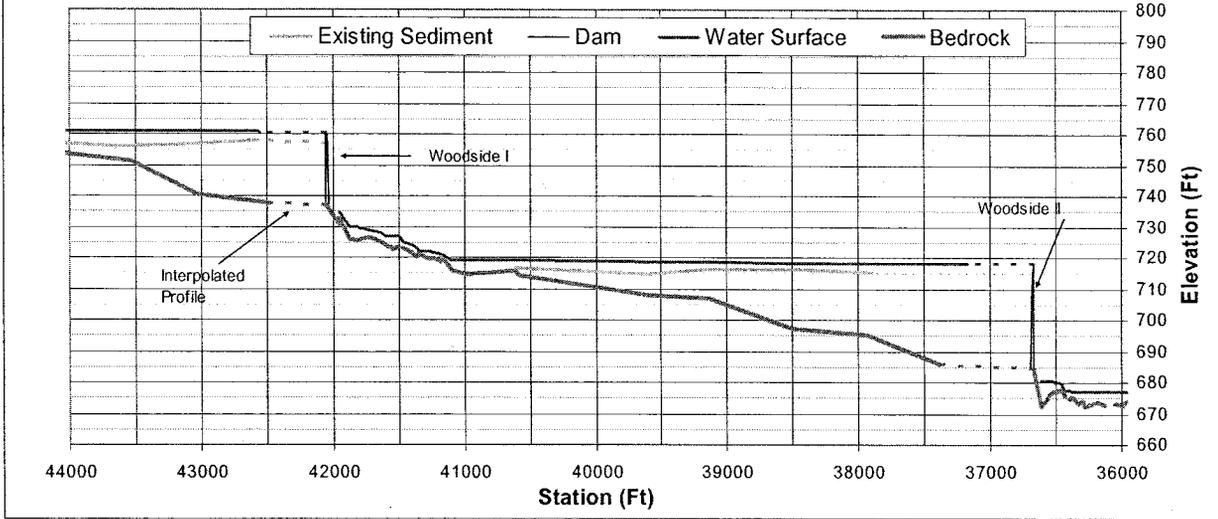


Proposed Design



BUCK
ENGINEERING

Existing Twelve Mile Creek Profile



Proposed Twelve Mile Creek Profile

